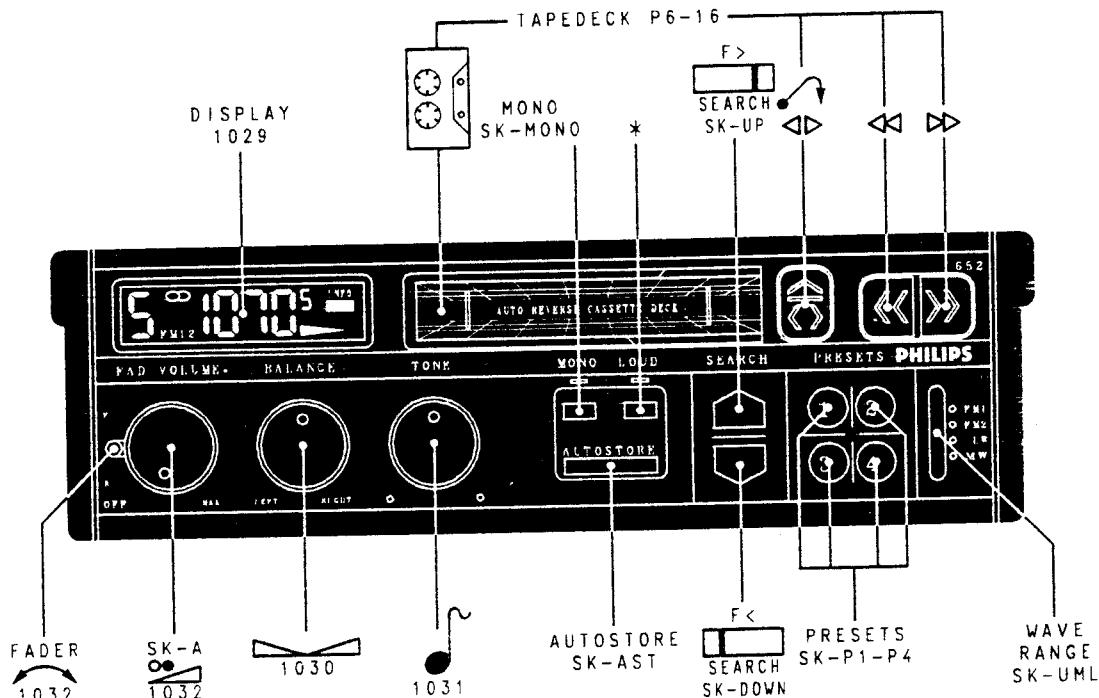


Service
Service
Service

For repair information of the cassette deck see Service
Manual of Auto Cassette deck P6-16

Service Manual

12 V 



* = SK-LOUD DC652
SK-INFO DC656

Documentation Technique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Servicio



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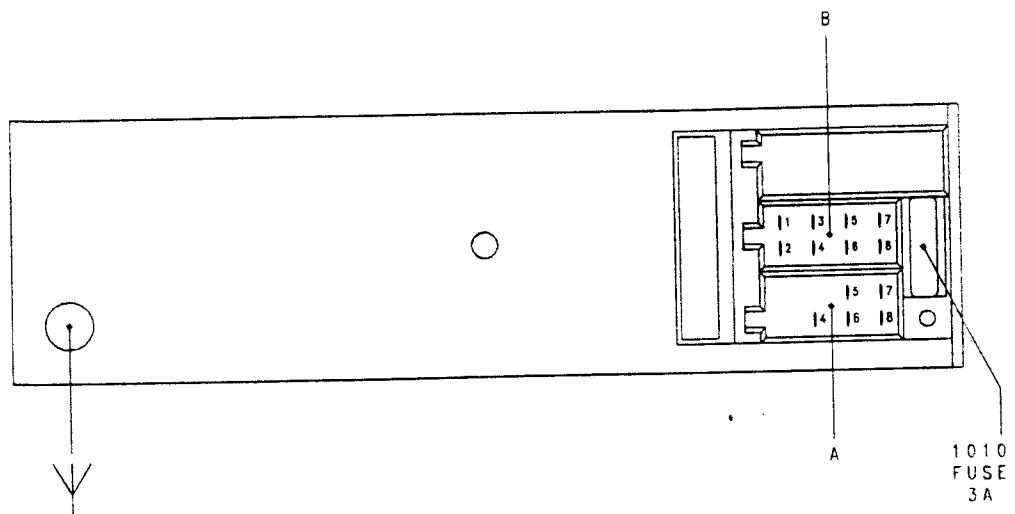
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PHILIPS

Published by
Service Consumer Electronics



CONNECTIONS OF BLOCK

A4 : + 14,4V DC PERMANENT

A5 : AUTOM. AERIAL

A6 : N. C.

A7 : + 14,4V DC SWITCHED

A8 : GROUND

B1 : REAR RIGHT

B2 : GROUND

B3 : FRONT RIGHT

B5 : FRONT LEFT

B6 : GROUND

B7 : REAR LEFT

GB TECHNICAL DATA

GENERAL

Power supply : 14.4V DC
Dimensions : 180x51x150 mm

RADIO

LW : 144-288 KHz
MW : 531-1611 KHz
FM : 87.5-108 MHz
IF-AM : 10.7 MHz
IF-FM : 10.7 MHz
Sensitivity 26 dB S/R : 160 μ V (LW)
: 110 μ V (MW)
: 110 μ V (MW)
: 4 μ V (FM)
Limitation a-3 dB : 15 μ V
10 dB crosstalk : 150 μ V

CASSETTE

Number of tracks : 2x2
Tape speed : 4.76 cm/sec.
Wow and flutter : $\leq 0.35\%$
Crosstalk : ≥ 30 dB

AMPLIFIER

Output power (D $\leq 10\%$) : 4x3.8W ± 1 dB/4 Ω
: 2x5W ± 1 dB/4 Ω
Loudest : +6dB at 125 Hz
: +1dB at 1 kHz
Tone control : +4/-12 dB at 10 kHz

NL TECHNISCHE GEGEVENS

ALGEMEEN

Voedingsspanning : 14.4V, gelijkspanning
Afmetingen : 180x51x150mm

RADIO

LG : 144-288 KHz
MG : 531-1611 KHz
FM : 87.5-108 MHz
MF-HM : 10.7 MHz
MF-FM : 10.7 MHz
Gevoeligheid bij 26 dB S/R : 160 μ V (LG)
: 110 μ V (MG)
: 110 μ V (MG)
: 4 μ V (FM)
Begrenzing a-3dB : 15 μ V
10 dB overspraak : 150 μ V

CASSETTESPELER

Aantal sporen : 2x2
Bandsnelheid : 4,76 cm/sec.
Wow & Flutter : $\leq 0.35\%$
Overspraak : ≥ 30 dB

VERSTERKER

Uitgangsvermogen (D $\leq 10\%$) : 4x3,8W ± 1 dB/4 Ω
: 2x5W ± 1 dB/4 Ω
Loudest (fysiologische correctie) : +6dB bij 125 Hz
: +1dB bij 1 kHz
Toonregeling : +4/-12 dB bij 10 kHz

D TECHNISCHE DATEN

ALLGEMEIN

Speisespannung : 14,4 V DC
Abmessungen (BxHxT) : 180 x 51 x 150 mm

RADIOTEIL

LW : 144-288 KHz
MW : 531-1611 KHz
UKW : 87,5-108 MHz
ZF/AM : 10,7 MHz
ZF/FM : 10,7 MHz
Empfindlichkeit bei 26 dB S/R : 160 μ V (LW)
: 110 μ V (MW)
: 110 μ V (MW)
: 4 μ V (UKW)
Begrenzung a-3 dB : 15 μ V
10 dB Übersprechdämpfung : 150 μ V

CASSETTENTEIL

Anzahl der Spuren : 2 x 2
Bandgeschwindigkeit : 4,76 cm/sec
Gleichlaufschwankungen : $\leq 0,35\%$
Übersprechdämpfung : ≥ 30 dB

VERSTÄRKER

Ausgangsleistung (D $\leq 10\%$) : 4 x 3,8 W ± 1 dB/4 Ω
Gehörrichtige Lautstärkeregulation : +6 dB bei 125 Hz
: +1 dB bei 1 kHz
Klangregelung : +4/-12 dB bei 10 kHz

I CARATTERISTICHE TECNICHE

GENERALITA

Tensione d'alimentazione : 14,4V CC
Dimensione : 180x51x150 mm

RADIO

V.O.
Sensibilità a 26 dB S/B : 160 μ V (GO)
: 110 μ V (PO)
: 110 μ V (PO)
: 4 μ V (FM)
Soglia a a-3dB : 15 μ V
10 dB crosstalk : 150 μ V

RIPRODUTTORE DI CASSETTE

numero di piste : 2x2
Velocità d'avanzamento : 4,76 cm/s.
Wow e futter : $\leq 0,35\%$
Crosstalk : ≥ 30 dB

AMPLIFICATORE

Potenza d'uscita (D $\leq 10\%$) : 4x3,8W ± 1 dB/4 Ω
: v.o.
Volume : v.o.
Equalizzazione : v.o.

F CARACTÉRISTIQUES TECHNIQUES

GENERALITES

Tension d'alimentation : 14.4V DC
Dimensions : 180x51x150mm

RADIO

GO : 144-288 KHz
PO : 531-1611 KHz
FM : 87,5-108 MHz
IF-AM : 10,7 MHz
IF-FM : 10,7 MHz
Sensibilité à 26 dB S/B : 40 μ V (GO)
: 30 μ V (PO)
: 6 μ V (FM)
Point limite a-3dB : 15 μ V
10 dB diaphonie : 70 à 200 μ V

CASSETTE

Nombre de pistes : 2x2
Vitesse de défilement : 4,76 cm/sec.
Pleurage et scintillement : $\leq 0,35\%$
Diaphonie : ≥ 30 dB

AMPLIFICATEUR

Puissance de sortie (D $\leq 10\%$) : 4x3,8W ± 1 dB/4 Ω
: 2x5W ± 1 dB/4 Ω
Loudest (correction phys.) : + 6 dB à 125 Hz
: + 1 dB à 1 kHz
Régulation tonalité : + 4/-12 dB à 10 kHz

GR SERVICE TEST PROGRAMME

μC test

This test is called by turning the set on while pressing keys **1 and 2** at the same time. Besides the RAM, a great number of μC instructions are tested. If no faults occur, a special pattern will be displayed (see fig. 1F). The test can be stopped by turning off the set.

Display test

This test is called by turning on the set while **simultaneously** pressing keys **1 and 3**. A number of easily recognizable patterns will be displayed in succession (see figs. 1a thru 1h). If you want to make one of the patterns visible for a longer time, you only have to keep pressed key **1** for the required time. The test can be stopped by turning off the set.

Preprogrammed frequencies

To facilitate adjustment, a number of preprogrammed frequencies occur on each wave range. These frequencies can be "called" as follows: Put the set out of action, press key P1+4 and put the set into operation. Depending on the wave range, and the keys P1+4 selected, the frequencies from the table in figure 1 will be displayed.

NL SERVICE TESTPROGRAMMA

μC-test

Deze test wordt opgeroepen door het apparaat in te schakelen en door tegelijkertijd de toetsen **1 en 2** in te drukken. Behalve de RAM wordt een groot aantal μC-instructies getest. Indien er geen fouten gevonden worden, verschijnt een speciaal patroon in de display (zie figuur 1a tot en met 1f). De test wordt gestopt door het uitschakelen van het apparaat.

Display-test

Deze test wordt opgeroepen door het apparaat in te schakelen en door **tegelijkertijd** de toetsen **1 en 3** in te drukken. Een aantal eenvoudige patronen verschijnt nu achtereenvolgens in de display. (Zie fig. 1a tot en met 1h). Indien u een van de patronen speciaal en langer wilt bekijken, hoeft u alleen maar gedurende de gewenste tijd toets **1** in te drukken. De test wordt gestopt door het apparaat uit te schakelen.

Vorgeprogrammeerde frequenties

Om de instelling te vergemakkelijken, telt elk golflengtegebied een aantal vorgeprogrammeerde frequenties. Deze kunnen als volgt worden opgeroepen: Het apparaat uitschakelen, op de toets P1 + 4 drukken en het apparaat inschakelen. Al naargelang het golfbereik en de toetsen P1 + 4 die u gekozen heeft, kunnen de frequenties uit figuur 1 in de display zichtbaar worden gemaakt.

I PROGRAMMA DI PROVA SERVIZIO

Prova di μC

La prova viene iniziata accendendo l'apparecchio e premendo contemporaneamente i tasti **1 e 2**. Oltre alla RAM viene verificato un gran numero di istruzioni al μC. Se non vengono rilevate anomalie, sul quadrante appare una mira speciale (v. fig. 1F). La prova viene terminata spegnendo l'apparecchio.

Prova del quadrante di visualizzazione

La prova viene iniziata accendendo l'apparecchio e premendo contemporaneamente i tasti **1 e 3**. Dopodiché sullo schermo appaiono in successione una serie di mire semplici (v. fig. da 1 a 14). Se si desidera vedere una

della mira in particolare e per un periodo più lungo, basta premere il tasto **1** al momento voluto.

La prova viene terminata spegnendo l'apparecchio.

Frequenze preprogrammate

Al fine di facilitare la correzione, un certo numero di frequenze preprogrammate figurano su ciascuna gamma d'onda. Queste vengono attivate nel modo seguente: Spegnere l'apparecchio, premere il tasto **P1+4** e accendere l'apparecchio.

A seconda della gamma d'onda, e i tasti da **1 a 4**, potranno essere visualizzate le frequenze della tabella in fig. 1

	FM1	FM2	MW	1
P1	87,5 MHz	93,15 MHz	990 KHz	141
P2	93 MHz		1566 KHz	168
P3	104 MHz		1611 KHz	
P4	108 MHz		1611 KHz	

Fig. 1

F PROGRAMME DE TEST SERVICE

Test du μC

Ce test est appelé en mettant l'appareil en marche et en pressant en même temps les touches **1 et 2**. Un grand nombre d'instructions au μC sont testées outre à la RAM. S'il n'y a pas d'erreurs constatées, une mire spéciale apparaît à l'afficheur (voir fig. 1F). Il est mis fin au test par la mise hors circuit de l'appareil.

Test de l'afficheur

Ce test est appelé par la mise en marche de l'appareil ainsi que par la pression **simultanée** des touches **1 et 3**. Un certain nombre de mires simples et se succèdent alors à l'écran (voir aux fig. de 1a à 1h). Si vous désirez voir une des mires particulier et pour un plus long moment, il suffit de presser la touche **1** pendant le moment voulu. Il est mis fin au test par la mise hors circuit de l'appareil.

Fréquences préprogrammées

Afin de faciliter l'ajustage, un certain nombre de fréquences préprogrammées figurent sur chaque gamme d'onde. Celles-ci sont "rappelables" comme suit: Mettre l'appareil hors service, presser la touche **P1+4** et mettre l'appareil en service. Selon la gamme d'onde et les touches **P1+4** choisies les fréquences du tableau de la fig. 1 pourront être affichées.

D PRÜFPROGRAMM ZUR WARTUNG

μC-Prüfung

Das Programm zur μC-Prüfung wird durch Einschalten des Geräts und **gleichzeitiges** Drücken der Tasten **1 und 2** aufgerufen.

Neben dem RAM wird eine große Anzahl von μC-Befehlen überprüft. Entdeckt das Programm keine Fehler, so erscheint im Display eine entsprechende Anzeige (s. Abb. 1f).

Die Prüfung wird durch Ausschalten des Geräts beendet.

Display-Prüfung

Das Programm zur Display-Prüfung wird durch Einschalten des Geräts und **gleichzeitiges** Drücken der Tasten **1 und 3** aufgerufen.

Auf dem Display wechseln sich mehrere einfache Anzeigen ab (s. Abb. 1a-h). Zum Festhalten einer Anzeige auf dem Display beim Erscheinen dieser Anzeige Taste **1** gedrückt halten.

Die Prüfung wird durch Ausschalten des Geräts beendet.

Vorprogrammierte Frequenzen

Zur Vereinfachung der Abstimmung gibt es in jedem Wellenbereich eine Reihe von vorprogrammierten Frequenzen. Diese können folgendermaßen aufgerufen werden:

Gerät ausschalten, Taste **1,2,3** oder **4** drücken, Gerät einschalten.

Durch Wahl des Wellenbereichs und der Tasten **1-4** können so alle Frequenzen, die in der Tabelle von Abb. 1 dargestellt sind, auf dem Display aufgerufen werden.

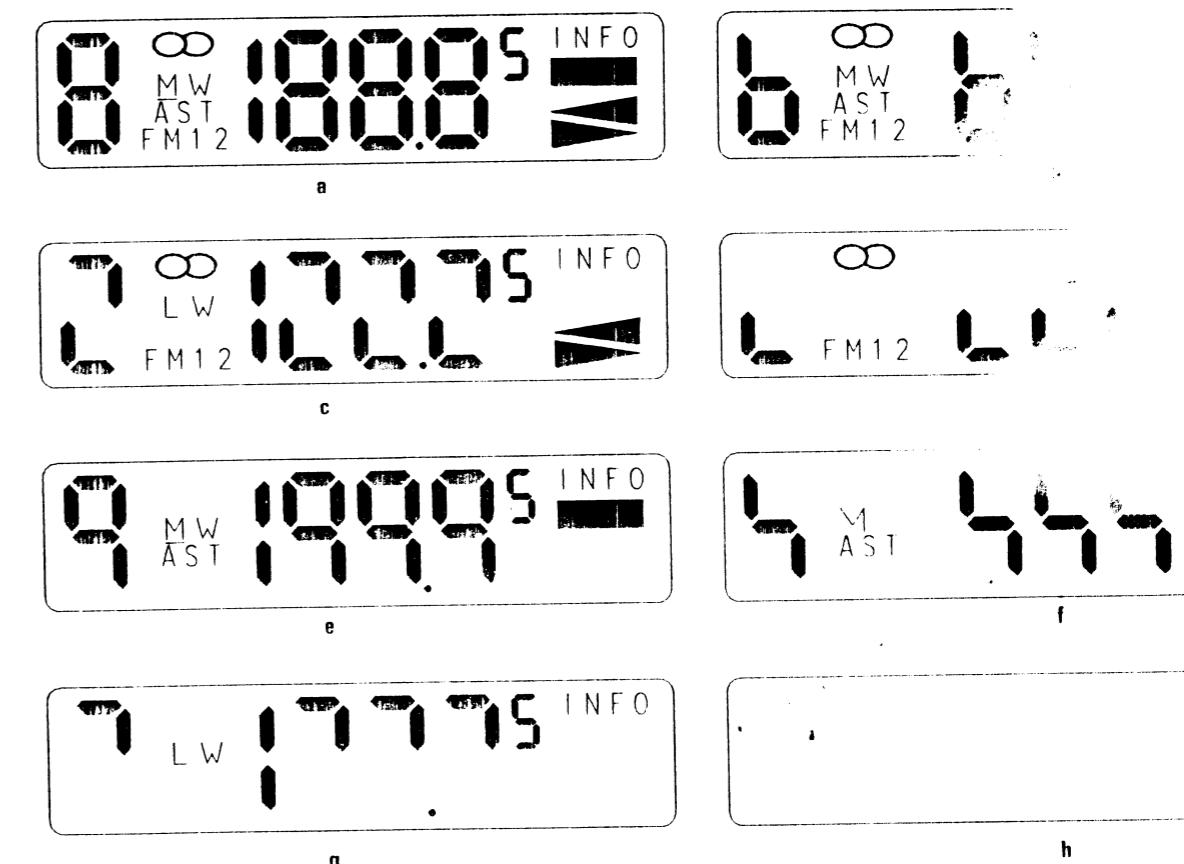


Fig. 2

...V
 ...V FM
 ...V AM
 ...V >
 ...V <
 ...V eject
 ...V >>
 ...V <<

6000 LA 1177

1 = 2.6 V FM
 2 = 7.5 V FM
 3 = 7.1 V FM
 4 = 1.9 V FM
 5 = GND

any position
 position FM
 position AM
 position play forward
 position play reverse
 position eject
 FFWD
 REW

6001 TEA 6200

1 = 6.5 V AM
 2 = 3.9 V AM
 3 = 8.0 V
 4 = 8.0 V
 5 = 8.0 V
 6 = 8.0 V
 7 = 0.6 V
 8 = 3.9 V AM
 9 = 3.9 V AM
 10 = GND

6 = 4.5 V FM
 7 = 1.3 V FM
 8 = 4.0 V FM
 9 = 7.5 V FM

11 = 6.5 V AM
 12 = 1.2 V
 13 = 4.5 V AM
 14 = 8.2 V AM
 15 = 4.5 V AM
 16 = 4.5 V AM
 17 = GND
 18 = 1.0 V AM
 19 = 1.2 V AM
 20 = 3.2 V AM

6002 TEA 6100

1 = 8.1 V
 2 = 0.6 V
 3 = 4.3 V signal MP-3
 0.0 V no signal
 4 = N.C.
 5 = MP-3
 6 = 40 KHZ
 7 = GND
 8 = 8.0 V
 9 = 5.0 V SCL
 10 = 5.0 V SDA

11 = 3.6 V MP-5
 12 = 4.4 V
 13 = 4.4 V
 14 = 2.0 V
 15 = 3.6 V
 16 = 2.8 V
 17 = 2.8 V
 18 = 2.8 V
 19 = 2.8 V
 20 = GND

6003 TSA 6057

1 = 4 MHZ
 2 = 4 MHZ
 3 = 4.8 V
 4 = GND
 5 = 1.8 V
 6 = 1.8 V
 7 = 1.8 V
 8 = <0.8 V FM
 8.2 V AM

9 = 40 KHZ +/- 0.6 Hz
 10 = 4.8 V SDA
 11 = 4.8 V SCL
 12 = GND
 13 = 1.0 V to 5.8 V FM
 14 = 2.0 V
 15 = N.C.
 16 = 7.9 V

6005 TEA 5581

1 = 3.5 V
 2 = 1.6 V
 3 = 5.0 V mono
 0.2 V stereo
 4 = 1.5 V signal
 0.0 V no signal
 5 = GND
 6 = 0.0 V mono
 1.6 V stereo
 7 = 1.3 V FM stereo
 2.0 V AM-FM mono
 8 = 1.7 V FM stereo MP-6
 0.9 V AM-FM mono

9 = 7.5 V AM
 7.2 V FM
 10 = 5.0 V rad mute on
 0.0 V rad mute off
 11 = 0.0 V main mute on
 5.0 V main mute off
 12 = 3.4 V
 13 = 3.4 V
 14 = 1.5 V
 15 = 2.1 V
 16 = 3.4 V

6006 TD 7784

1 = 7.8 V
 2 = 2.7 V >,<
 0.0 V eject
 3 = 0.0 V >,eject
 5.0 V <
 4 = N.C.
 5 = 2.2 V
 6 = 2.2 V
 7 = 2.2 V
 8 = GND

9 = 2.2 V
 10 = N.C.
 11 = 2.2 V
 12 = 2.2 V
 13 = 2.2 V
 14 = N.C.
 15 = N.C.
 16 = 2.7 V

6007 TMP 47C421

13 = 5.0 V eject; >,<
 14 = 0.0 V >
 5.1 V <
 15 = 0.0 V ind stereo on
 5.0 V ind stereo off
 17 = 0.0 V reset on
 5.0 V reset off
 19 = 4.3 V >,<
 0.0 V eject
 20 = 0.0 V loud on
 info on
 1.4 V loud off
 info off
 23 = 0.0 V manual search
 0.0 V dx FM+AST
 4.5 V loc FM+AST
 27 bleep
 28 = 5.0 V main mute off
 0.0 V main mute on
 29 = 5.0 V rad mute on
 0.0 V rad mute off
 30 = 5.0 V mono on
 0.0 V mono off
 39 = 0.0 V cass mute off
 7.2 V cass mute on

6010 TDA 1518

1 = 2.1 V
 2 = 2.1 V
 3 = GND
 4 = 2.1 V
 5 = 7.6 V
 6 = 13.5 V
 7 = GND
 8 = 13.5 V
 9 = 7.5 V
 10 = 14.4 V
 11 = 14.4 V
 12 = 7.6 V
 13 = 2.1 V

1060 IAC THIFI

1 = N.C.
 2 = 2.5 V
 3 = N.C.
 4 = 4.3 V signal
 0.0 V no signal
 5 = 4.0 V
 6 = 7.7 V
 7 = 8.1 V
 8 = GND

7001 BF 992 (chip)

1 = 3.5 V (s)
 2 = 7.8 V (d)
 3 = 5.5 V (g2)
 4 = 3.8 V (g1)
 5 = 5.5 V FM
 e = GND
 b = 0.0 V manual search
 0.0 V dx FM + AST
 0.7 V loc FM + AST
 c = 5.5 V

7007 BC 558

e = 8.2 V
 b = 7.4 V
 c = 0.0 V AM
 8.1 V FM
 e = 8.2 V
 b = 0.6 V loud off
 0.0 V loud on
 c = 0.0 V

7019 BC 547

e = GND
 b = 0.6 V
 c = 0.1 V >,<
 e = GND
 b = 0.7 V reset on
 0.0 V reset off
 c = 5.0 V reset off
 0.0 V reset on

7040 BC547

e = 5.1 V
 b = 5.8 V
 c = 14.4 V
 e = 5.1 V
 b = 8.2 V
 c = 14.4 V

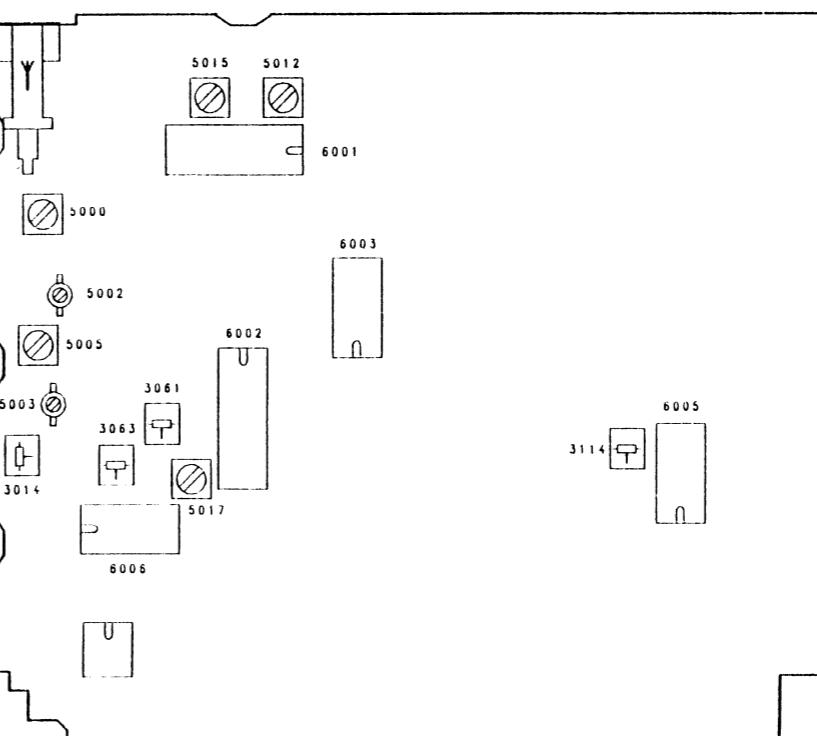
7043 BD 939 F

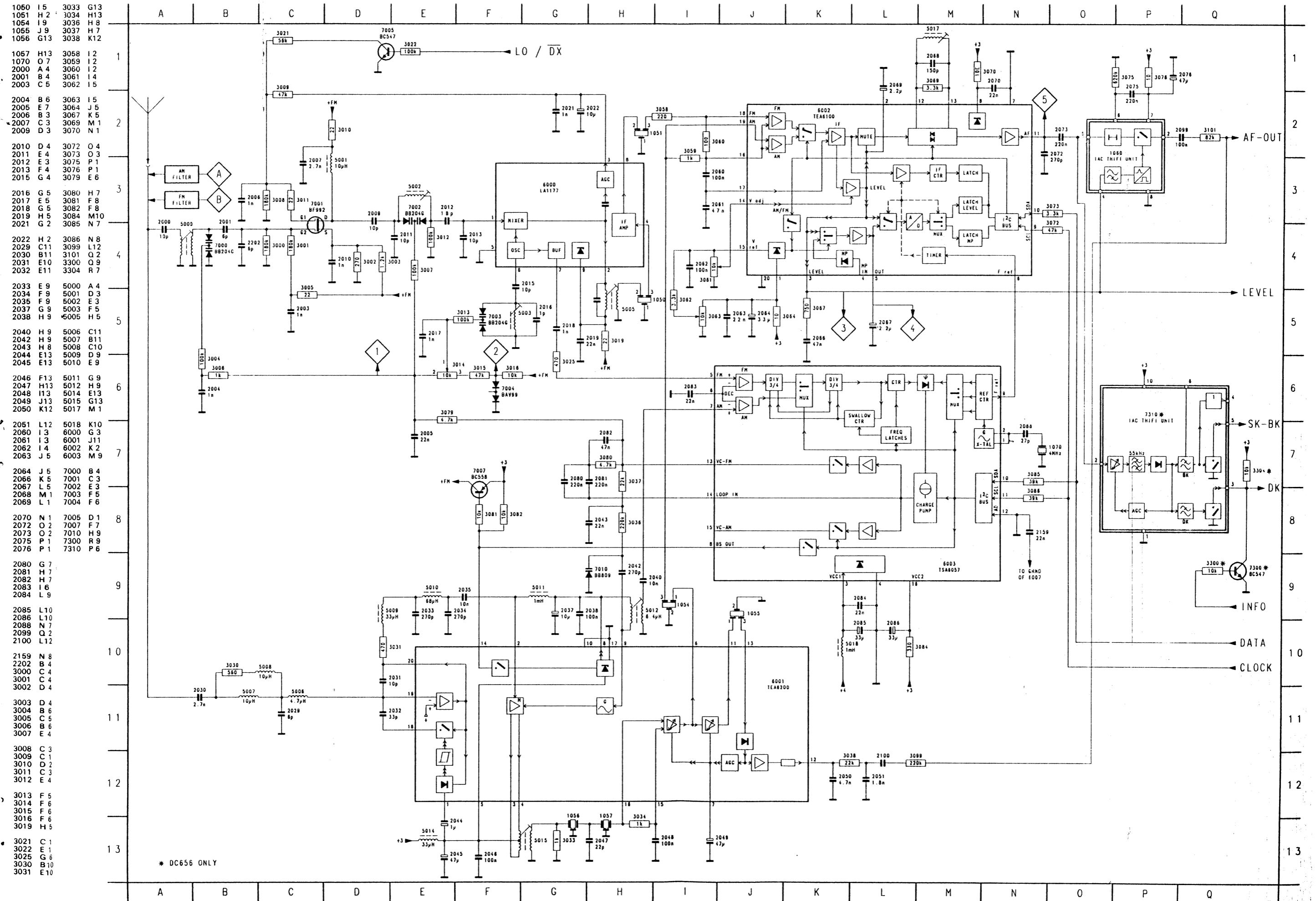
e = 5.1 V
 b = 5.8 V
 c = 14.4 V
 e = 5.1 V
 b = 5.8 V
 c = 14.4 V

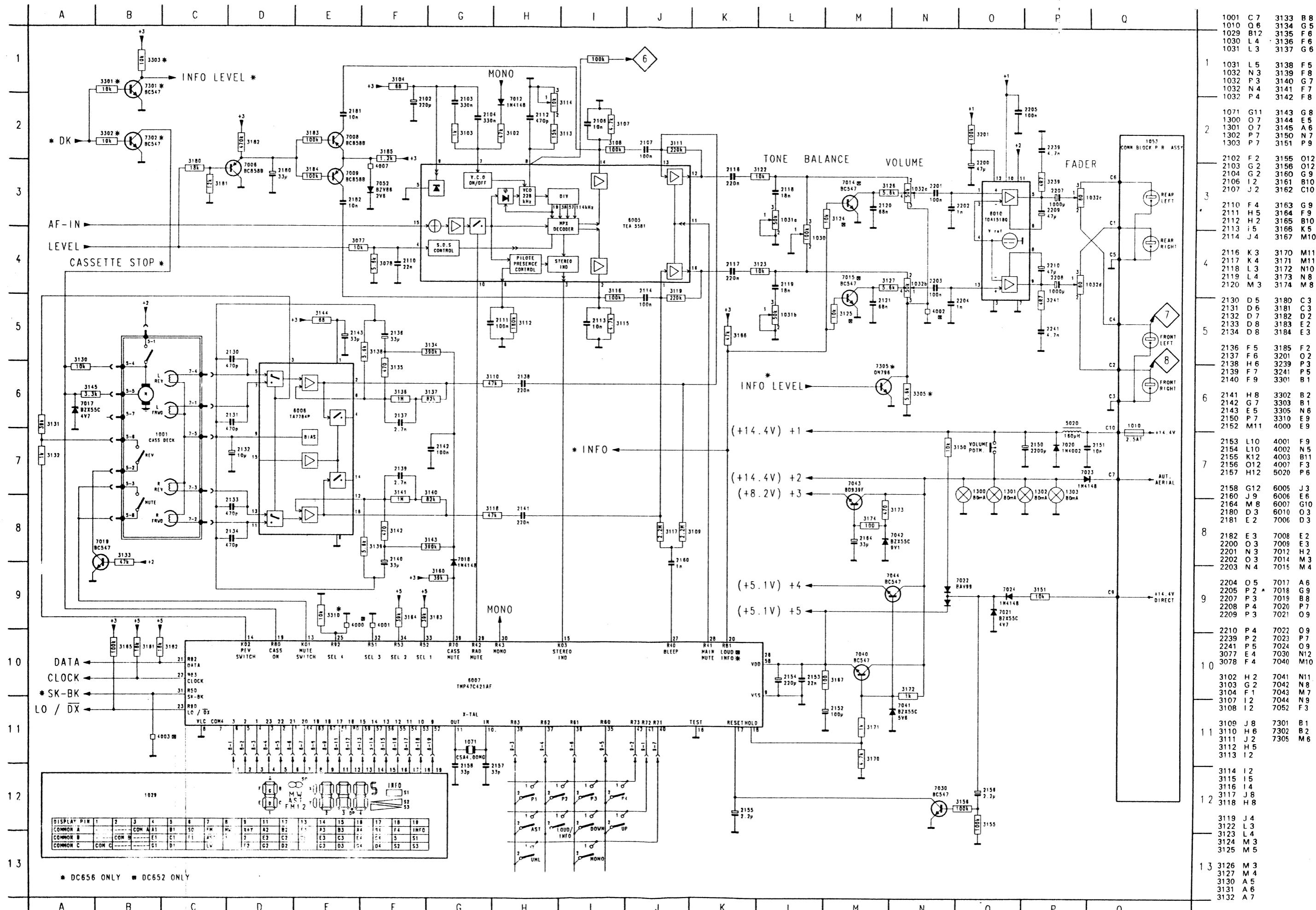
e = 8.2 V
 b = 8.9 V
 c = 14.4 V

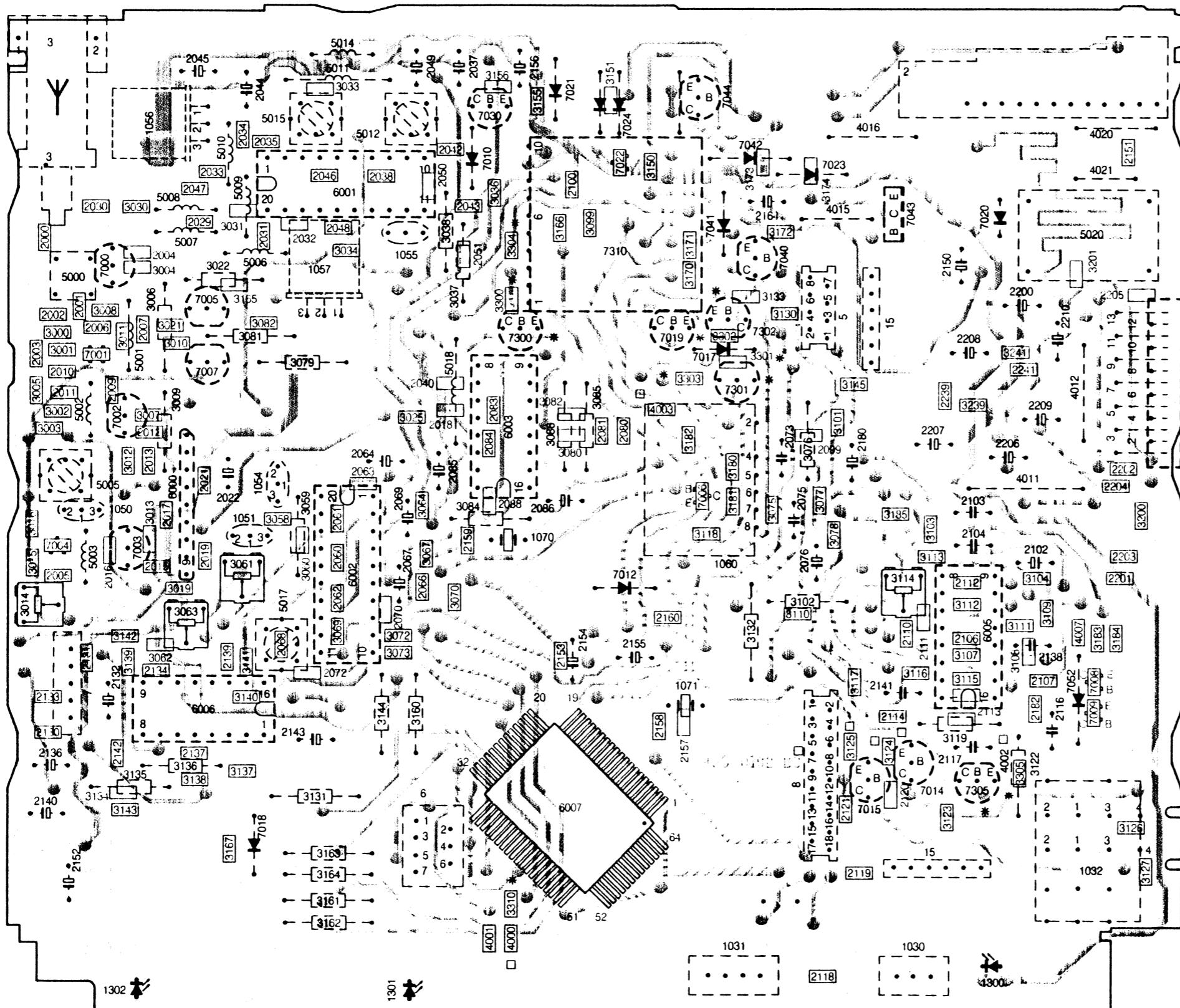
e = 8.2 V
 b = 8.9 V
 c = 14.4 V

ADJUSTMENT	SK					
FM OSCILLATOR	FM	87,5MHz unmodulated		P1 (87,5MHz)	5003	
FM-IF	FM	87,5MHz unmodulated		P1 (87,5MHz)	5005	
DETECTOR	FM	93MHz 100µV		P2 (93MHz)	5017	MIN DC (6002) 11 and 15 ≤ 200mV
FM-RF	FM	87,5MHz unmodulated		P1 (87,5MHz)	5000	
		93MHz 100µV		P2 (93MHz)	5002	
		104MHz unmodulated		P3 (104MHz)	3014	
OC-3dB	FM	93MHz 1mV ΔF=22,5kHz Fmod=1kHz		P2 (93MHz)	3061	
		93MHz 15µV ΔF=22,5kHz Fmod=1kHz			3114	
VCO STEREO DECODER	FM	no signal				
AM OSCILLATOR	PO	531kHz modulated		531kHz	5012	
AM-IF	PO	990kHz modulated		P1 (990kHz)	5015	
AM SEARCH LEVEL	PO	990kHz 70µV unmodulated		P1 (990kHz)	3063	









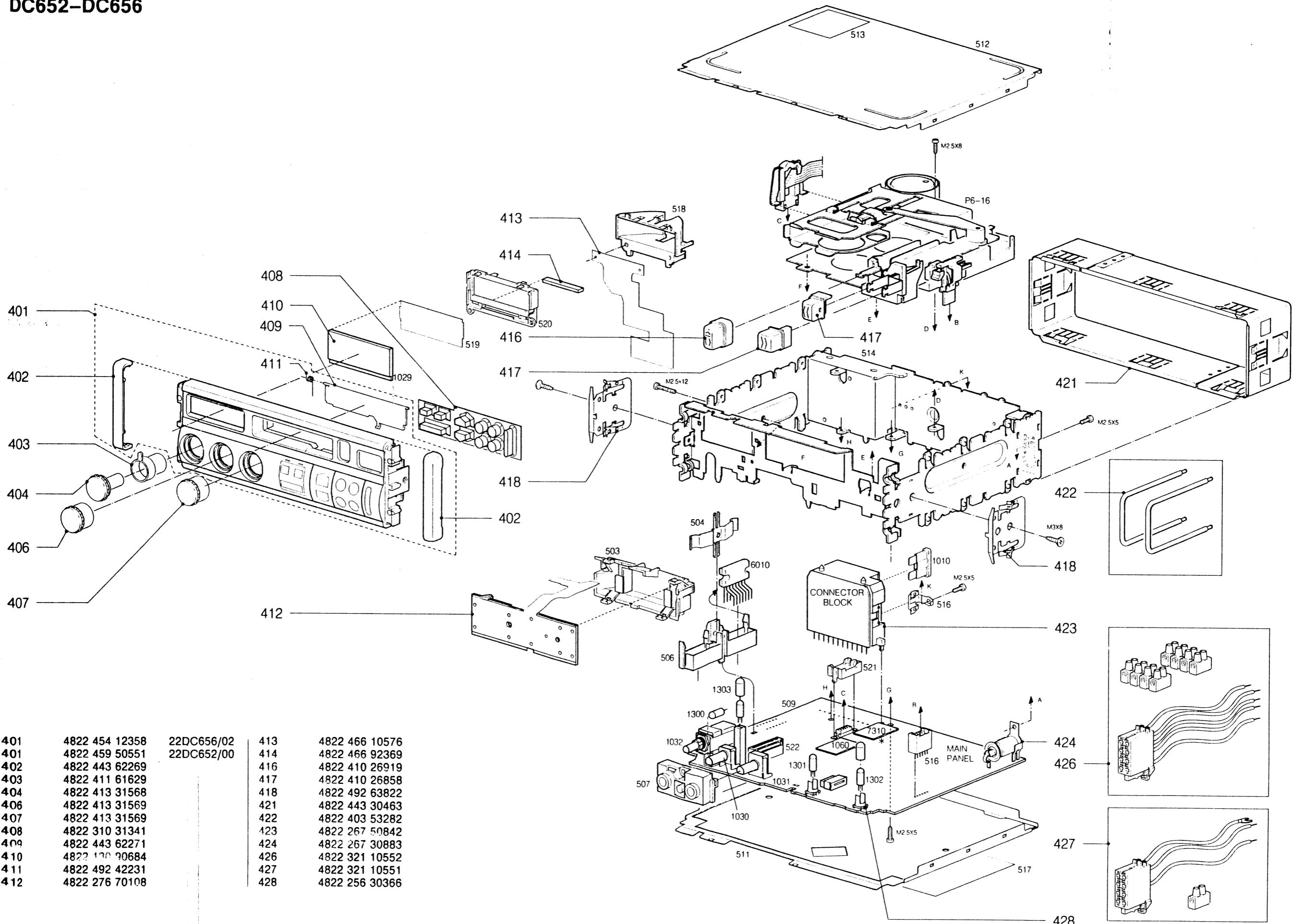
ONLY FOR DC652

* ONLY FOR DC656

PCB.015
T12/928

1030	E 2	2111	D 2	3070	C 4	4000	E 4
1031	E 3	2112	C 2	3072	D 5	4001	
1032	E 1	2113	D 2	3073	D 5	4002	D 2
1050	C 6	2114	D 2	3075	C 3	4003	B 3
1051	C 5	2116	D 1	3076	C 2	4007	C 1
1054	C 5	2117	D 2	3077	C 2	4011	C 2
1055	B 5	2118	E 3	3078	C 2	4012	B 1
1056	A 6	2119	E 2	3079	B 5	4015	B 2
1057	B 5	2120	D 2	3080	C 4	4016	A 2
1060	C 3	2121	D 2	3081	B 5	4020	A 1
A	C 4	2130	D 6	3082	B 5	4021	A 1
	D 3	2131	D 6	3084	C 4	5	
	E 2	2132	D 6	3085	B 3	5000	B 6
	E 4	2133	D 6	3086	C 4	5001	B 6
	E 6	2134	D 6	3099	B 3	5002	B 6
	B 2	2136	D 6	3101	C 2	5003	C 6
	E 2	2137	D 6	3102	C 3	5005	C 6
	A 2	2138	D 1	3103	C 2	5006	B 5
	B 6	2139	D 5	3104	C 1	5007	B 6
	B 6	2140	D 6	3107	D 2	5008	B 6
2000	B 6	2141	D 2	3108	D 1	5009	A 5
2003	B 6	2142	D 6	3109	C 1	5010	A 5
2004	B 6	2143	D 5	3110	C 3	5011	A 5
2005	C 6	2150	B 2	3111	C 2	5012	A 5
2006	B 6	2151	A 1	3112	C 2	5014	A 5
2007	B 6	2152	E 6	3113	C 2	5015	A 5
B	B 6	2153	D 4	3114	C 2	5017	C 5
	B 6	2154	D 4	3115	D 2	5018	B 4
	B 6	2155	D 3	3116	D 2	5020	B 1
	C 6	2156	A 4	3117	D 2	6	D 4
	C 6	2157	D 3	3118	C 3	6000	C 6
	C 6	2158	D 3	3119	D 2	6001	A 5
	C 6	2159	C 4	3122	D 1	6002	C 5
	C 6	2160	C 3	3123	D 2	6003	C 4
	C 4	2164	B 3	3124	D 2	6005	C 2
	C 5	2180	C 2	3126	D 1	6006	D 6
2021	C 5	2182	D 1	3125	D 2	6007	D 4
2022	C 5	2200	B 2	3127	E 1	6010	B 1
2029	B 6	2201	C 1	3130	B 3	7	D 6
2030	B 6	2202	C 1	3131	D 5	7000	B 6
2031	B 5	2203	C 1	3132	C 3	7001	B 6
2032	B 5	2204	C 1	3133	B 3	7002	C 6
2033	A 5	2205	B 1	3134	D 6	7003	C 6
C	A 5	2206	C 2	3135	D 6	7004	C 6
	A 5	2207	C 2	3136	D 6	7005	B 6
	A 4	2208	B 2	3137	D 5	7006	C 3
	A 5	2209	B 1	3138	D 6	7007	B 6
	B 4	2210	B 1	3139	D 6	7008	D 1
	A 4	2239	B 2	3140	D 5	7009	D 1
	B 4	2241	B 2	3141	D 5	7010	A 4
	A 5	3	A 6	3142	D 6	7012	C 3
	A 6	3000	B 6	3143	D 6	7014	D 2
	A 5	3001	B 6	3144	D 4	7015	D 2
2047	A 6	3002	B 6	3145	B 2	7017	B 3
2048	B 5	3003	C 6	3150	A 3	7018	D 5
2049	A 4	3004	B 6	3151	A 3	7019	B 3
2050	A 4	3005	B 6	3155	A 4	7020	B 2
2051	B 4	3006	B 6	3156	A 4	7021	A 4
2060	C 5	3007	C 6	3160	D 4	7022	A 3
2061	C 5	3008	B 6	3161	E 5	7023	A 2
D	C 5	3009	B 5	3162	E 5	7024	A 3
	C 5	3010	B 6	3163	E 5	7030	A 4
	C 5	3011	B 6	3164	E 5	7040	B 3
	C 4	3012	C 6	3165	B 5	7041	C 2
	C 4	3013	C 6	3166	B 4	7042	A 3
	D 5	3014	C 6	3167	D 5	7043	B 2
	C 4	3015	C 6	3170	B 3	7044	A 3
	C 4	3016	C 6	3171	B 3	7052	D 1
	D 5	3019	C 6	3172	B 3	7300	B 4
	C 3	3021	B 6	3173	A 3	7301	B 3
2075	C 2	3022	B 5	3174	A 2	7302	B 3
2076	C 2	3025	C 5	3180	C 3	7305	D 2
2080	C 3	3030	B 6	3181	C 3	7310	B 4
2081	C 3	3031	B 5	3182	C 3	8	D 2
2082	B 4	3033	A 5	3183	D 1		
2083	B 4	3034	B 5	3184	D 1		
2084	C 4	3036	A 4	3185	C 2		
2085	C 4	3037	B 4	3200	C 1		
2086	C 4	3038	B 4	3201	B 1		
2088	C 4	3058	C 5	3239	B 2		
2099	C 2	3059	C 5	3241	B 2		
2100	A 4	3060	C 5	3300	B 4		
2102	C 1	3061	C 5	3301	B 3		
2103	C 2	3062	D 6	3302	B 3		
2104	C 2	3063	C 6	3303	B 3		
2106	D 2	3064	C 4	3304	B 4		
2107	D 1	3067	C 4	3305	D 1		
2110	D 2	3069	C 5	3310	E 4		

DC652-DC656



401	4822 454 12358	22DC656/02	413	4822 466 10570
401	4822 459 50551	22DC652/00	414	4822 466 92365
402	4822 443 62269		416	4822 410 26915
403	4822 411 61629		417	4822 410 26851
404	4822 413 31568		418	4822 492 63822
406	4822 413 31569		421	4822 443 30463
407	4822 413 31569		422	4822 403 53282
408	4822 310 31341		423	4822 267 50842
409	4822 443 62271		424	4822 267 30883
410	4822 130 90684		426	4822 321 10552
411	4822 492 42231		427	4822 321 10553
412	4822 276 70108		428	4822 256 30366

* ONLY 22DC65

2001	4822 126 10205	6pF 0.5pF NPO 0805	2131 5322 122 32268 470pF 5% NPO 0805
2002	4822 126 10205	6pF 0.5pF NPO 0805	2132 4822 124 22403 10μF 20% 16V
2003	4822 122 33178	1nF 20% 0805	2133 5322 122 32268 470pF 5% NPO 0805
2004	4822 122 33178	1nF 20% 0805	2134 5322 122 32268 470pF 5% NPO 0805
2005	4822 122 33555	22nF 10% NPO 0805	2136 4822 124 40272 33μF20% 16V
2006	4822 122 33178	1nF 20% 0805	2138 4822 121 41876 220nF 20% 63V
2010	4822 122 33178	1nF 20% 0805	2140 4822 124 40272 33μF20% 16V
2012	5322 122 32965	18pF 5% NPO 0805	2141 4822 121 41876 220nF 20% 63V
2016	4822 122 33634	1pF 0.25pF 0805	2143 4822 124 40272 33μF20% 16V
2017	4822 122 33178	1nF 20% 0805	2150 4822 124 22412 2200μF 20% 16V
2018	4822 122 33178	1nF 20% 0805	2151 4822 122 33177 10nF 20% 50V
2019	4822 122 33555	22nF 10% 0805	2152 4822 124 41754 100nF20% 5.5V
2021	4822 122 33178	1nF 20% 0805	2153 4822 122 33555 22nF10%
2022	4822 124 22403	10μF 20% 16V	2154 4822 124 41756 220μF20% 10V
2029	4822 126 10205	6pF 0.5pF NPO 0805	2155 4822 124 40244 2.2μF20% 63V
2032	4822 122 33215	33pF 5% NPO 0805	2156 4822 124 40244 2.2μF20% 63V
2033	4822 122 33216	270pF 5% NPO 0805	2157 4822 122 33215 33pF 5% NPO 0805
2034	4822 122 33216	270pF 5% NPO 0805	2158 4822 122 33215 33pF 5% NPO 0805
2035	4822 122 33177	10nF 20% 0805	2159 4822 122 33555 22nF10%
2037	4822 124 40248	10μF20% 63V	2160 4822 122 33178 1nF 20% 50V
2040	4822 122 33177	10nF 20% 50V	2164 4822 124 40272 33μF20% 16V
2042	4822 122 33216	270pF 5% 50V	2180 4822 124 40272 33 μF 20% 16V
2043	4822 122 33555	22nF10%	2181 4822 122 33177 10nF 10% 0805
2044	4822 124 40242	1μF20% 63V	2182 4822 122 33177 10nF 10% 0805
2045	4822 124 41506	47μF 20% 16V	2200 4822 124 41506 47μF 20% 16V
2047	4822 122 33213	22pF 5% NPO 0805	2202 4822 122 33178 1nF 20% 50V
2049	4822 124 41506	47μF 20% 16V	2204 4822 122 33178 1nF 20% 50V
2050	4822 122 33337	4.7nF 20%	2207 4822 124 22411 1000μF 20% 10V
2051	4822 122 33219	1.8nF 10% 0805	2208 4822 124 22411 1000μF 20% 10V
2060	4822 122 33104	100nF10% 63V	2209 4822 124 41506 47μF 20% 16V
2061	4822 122 33211	47nF10% 63V	2210 4822 124 41506 47μF 20% 16V
2062	4822 122 33104	100nF10% 63V	2239 4822 122 33337 4.7nF 20%
2063	4822 122 33555	22nF 10% 0805	2241 4822 122 33337 4.7nF 20%z1
2064	4822 124 40272	33μF20% 16V	
2067	4822 124 40244	2.2μF20% 63V	
2068	4822 122 33338	150pF 5% 0805	
2069	4822 124 40244	2.2μF20% 63V	
2070	4822 122 33555	22nF10%	
2072	4822 122 33216	270pF 5% 50V	
2073	4822 121 41876	220nF 20% 63V	
2075	4822 121 41876	220nF 20% 63V	
2076	4822 124 41506	47μF 20% 16V	
2080	4822 122 32916	220nF20% 50V	
2081	4822 122 32916	220nF20% 50V	
2083	4822 122 33555	22nF10%	
2084	4822 122 33555	22nF10%	
2085	4822 124 40272	33μF20% 16V	
2086	4822 124 40272	33μF20% 16V	
2088	4822 122 33214	27pF 5% NPO 0805	
2100	4822 122 33555	22nF10%	
2102	4822 124 41554	220μF 20% 10V	
2103	4822 121 41877	330nF10% 63V	
2104	4822 121 41877	330nF10% 63V	
2106	4822 122 33177	10nF 20% 50V	
2110	4822 122 33555	22nF10%	
2113	4822 122 33177	10nF 20% 50V	
2116	4822 121 41876	220nF 20% 63V	
2117	4822 121 41876	220nF 20% 63V	
2118	4822 122 33893	18nF10% 63V	
2119	4822 122 33893	18nF10% 63V	
2130	5322 122 32268	470pF 5% NPO 0805	

3000	4822 116 90443	180k 5% 0.1W	3137 4822 111 91507 82Ω 5% 0.1W
3001	4822 116 90443	180k 5% 0.1W	3138 4822 111 91534 5k6 5% 0.06W
3002	4822 116 80882	270Ω 5% 0.1W	3139 4822 111 91534 5k6 5% 0.06W
3003	4822 116 80877	1k2 5% 0.1W	3140 4822 111 91507 82k 5% 0.1W 0805
3004	4822 111 91518	100k 5% 0.1W	3141 4822 116 80907 1M 5%
3005	4822 116 90467	22Ω 5% 0.1W	3142 4822 116 90446 470Ω 5% 0.1W
3007	4822 111 91518	100k 5% 0.1W	3143 4822 111 90182 390k 2% 0.25W
3008	4822 116 90443	180k 5% 0.1W	3145 4822 111 91526 3k3 5% 0.1W
3010	4822 116 90467	22Ω 5% 0.1W	3150 4822 111 91517 10k 5% 0.1W
3011	4822 116 90467	22Ω 5% 0.1W	3151 4822 111 91517 10k 5% 0.1W
3012	4822 111 91518	100k 5% 0.1W	3155 4822 111 91518 100k 5% 0.1W
3013	4822 111 91518	100k 5% 0.1W	3156 4822 111 91518 100k 5% 0.1W
3014	4822 100 20166	10k 30%LIN 0.1W	3165 4822 111 91518 100k 5% 0.1W
3015	5322 116 90216	47k 5% 0.06W	3166 5322 116 90216 47k 5% 0.06W
3016	4822 111 91517	10k 5% 0.1W	3167 4822 116 90441 100Ω 5% 0.1W
3033	4822 111 91516	1k 5% 0.1W	3180 4822 111 91521 18k 5% 0.1W 0805
3034	4822 111 91516	1k 5% 0.1W	3181 4822 116 81382 12k 5% 0.1W 0805
3036	4822 116 80881	220k 5% 0.1W	3182 4822 116 90447 470k 5% 0.1W 0805
3058	4822 116 90339	220Ω 5%	3183 4822 111 91518 100k 5% 0.1W 0805
3060	4822 116 90441	100Ω 5% 0.1W	3184 4822 111 91518 100k 5% 0.1W 0805
3061	4822 100 20166	10k 30%LIN 0.1W	3185 4822 116 80877 1k2 5% 0.1W 0805
3062	4822 111 91526	3k3 5% 0.1W	3201 4822 111 91518 100k 5% 0.1W
3063	4822 100 20166	10k 30%LIN 0.1W	3239 4822 116 90462 4Ω7 5% 0.1W
3064	4822 116 90457	10Ω 5% 0.1W	3241 4822 116 90462 4Ω7 5% 0.1W
3067	4822 116 80888	750Ω 5% 0.1W	3300 4822 111 91517 10k 5% 0.1W
3069	4822 111 91526	3k3 5% 0.1W	3301 4822 111 91517 10k 5% 0.1W
3070	4822 116 90457	10Ω 5% 0.1W	3302 4822 111 91517 10k 5% 0.1W
3072	5322 116 90216	47k 5% 0.06W	3303 4822 111 91517 10k 5% 0.1W
3073	4822 111 91526	3k3 5% 0.1W	3304 4822 111 91517 10k 5% 0.1W
3075	4822 111 90213	620k 2% 0.25W	3305 4822 111 91534 5k6 5% 0.06W
3077	4822 111 91517	10k 5% 0.1W	3310 4822 111 91518 100k 5% 0.1W
3078	4822 111 91534	5k6 5% 0.06W	4001 4822 111 90163 jumper
3080	4822 111 91532	4k7 5% 0.06W	4007 4822 111 90163 jumper
3082	4822 111 91517	10k 5% 0.1W	
3099	4822 116 80881	220k 5% 0.1W	
3101	4822 111 91507	82	

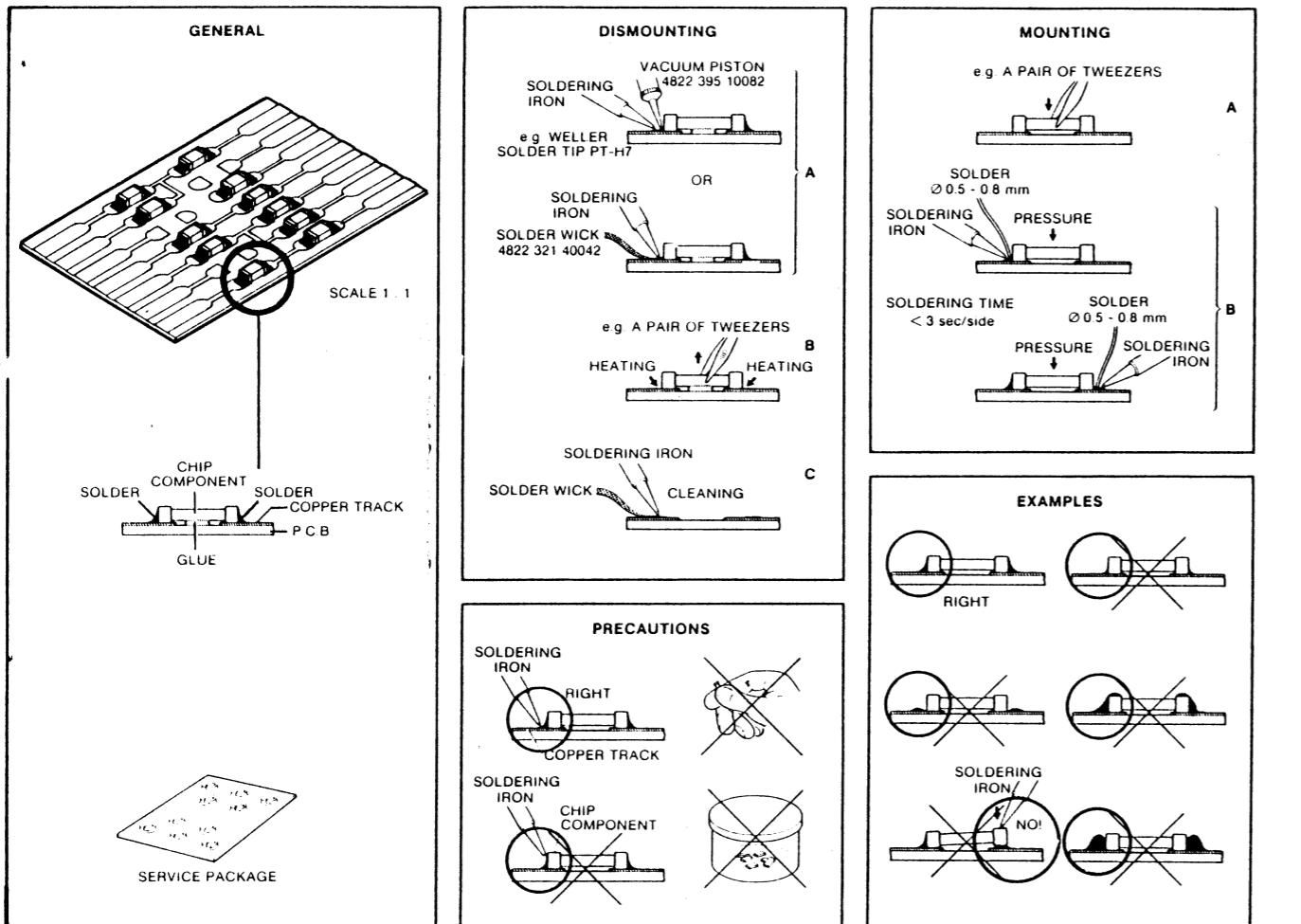
5% NPO 0805
 20% 16V
 5% NPO 0805
 5% NPO 0805
 20% 16V
 20% 63V
 20% 16V
 20% 63V
 20% 16V
 IF 20% 16V
 20% 50V
 20% 5.5V
 10%
 20% 10V
 20% 63V
 20% 63V
 5% NPO 0805
 5% NPO 0805
 0%
 0% 50V
 20% 16V
 20% 16V
 10% 0805
 10% 0805
 20% 16V
 0% 50V
 0% 50V
 IF 20% 10V
 IF 20% 10V
 20% 16V
 20% 16V
 20% 10V
 20%zl

3000	4822 116 90443	180k 5% 0.1W	3137	4822 111 91507	82Ω 5% 0.1W
3001	4822 116 90443	180k 5% 0.1W	3138	4822 111 91534	5k6 5% 0.06W
3002	4822 116 80882	270Ω 5% 0.1W	3139	4822 111 91534	5k6 5% 0.06W
3003	4822 116 80877	1k2 5% 0.1W	3140	4822 111 91507	82k 5% 0.1W 0805
3004	4822 111 91518	100k 5% 0.1W	3141	4822 116 80907	1M 5%
3005	4822 116 90467	22Ω 5% 0.1W	3142	4822 116 90446	470Ω 5% 0.1W
3007	4822 111 91518	100k 5% 0.1W	3143	4822 111 90182	390k 2% 0.25W
3008	4822 116 90443	180k 5% 0.1W	3145	4822 111 91526	3k3 5% 0.1W
3010	4822 116 90467	22Ω 5% 0.1W	3150	4822 111 91517	10k 5% 0.1W
3011	4822 116 90467	22Ω 5% 0.1W	3151	4822 111 91517	10k 5% 0.1W
3012	4822 111 91518	100k 5% 0.1W	3155	4822 111 91518	100k 5% 0.1W
3013	4822 111 91518	100k 5% 0.1W	3156	4822 111 91518	100k 5% 0.1W
3014	4822 100 20166	10k 30%LIN 0.1W	3165	4822 111 91518	100k 5% 0.1W
3015	5322 116 90216	47k 5% 0.06W	3166	5322 116 90216	47k 5% 0.06W
3016	4822 111 91517	10k 5% 0.1W	3167	4822 116 90441	100Ω 5% 0.1W
3019	4822 116 90467	22Ω 5% 0.1W	3170	4822 111 91532	4k7 5% 0.06W
3021	4822 111 91535	56k 5% 0.06W	3171	4822 111 91516	1k 5% 0.1W
3025	4822 116 90446	470Ω 5% 0.1W	3172	4822 111 91516	1k 5% 0.1W
3030	4822 111 91533	560Ω 5% 0.06W	3173	4822 116 90446	470Ω 5% 0.1W
3031	4822 116 90446	470Ω 5% 0.1W	3174	4822 116 90441	100Ω 5% 0.1W
3033	4822 111 91516	1k 5% 0.1W	3180	4822 111 91521	18k 5% 0.1W 0805
3034	4822 111 91516	1k 5% 0.1W	3181	4822 116 81382	12k 5% 0.1W 0805
3036	4822 116 80881	220k 5% 0.1W	3182	4822 116 90447	470k 5% 0.1W 0805
3058	4822 116 90339	220Ω 5%	3183	4822 111 91518	100k 5% 0.1W 0805
3060	4822 116 90441	100Ω 5% 0.1W	3184	4822 111 91518	100k 5% 0.1W 0805
3061	4822 100 20166	10k 30%LIN 0.1W	3185	4822 116 80877	1k2 5% 0.1W 0805
3062	4822 111 91526	3k3 5% 0.1W	3201	4822 111 91518	100k 5% 0.1W
3063	4822 100 20166	10k 30%LIN 0.1W	3239	4822 116 90462	4Ω7 5% 0.1W
3064	4822 116 90457	10Ω 5% 0.1W	3241	4822 116 90462	4Ω7 5% 0.1W
3067	4822 116 80888	750Ω 5% 0.1W	3300	4822 111 91517	10k 5% 0.1W
3069	4822 111 91526	3k3 5% 0.1W	3301	4822 111 91517	10k 5% 0.1W
3070	4822 116 90457	10Ω 5% 0.1W	3302	4822 111 91517	10k 5% 0.1W
3072	5322 116 90216	47k 5% 0.06W	3303	4822 111 91517	10k 5% 0.1W
3073	4822 111 91526	3k3 5% 0.1W	3304	4822 111 91517	10k 5% 0.1W
3075	4822 111 90213	620k 2% 0.25W	3305	4822 111 91534	5k6 5% 0.06W
3077	4822 111 91517	10k 5% 0.1W	3310	4822 111 91518	100k 5% 0.1W
3078	4822 111 91534	5k6 5% 0.06W	4001	4822 111 90163	jumper
3080	4822 111 91532	4k7 5% 0.06W	4007	4822 111 90163	jumper
3082	4822 111 91517	10k 5% 0.1W			
3099	4822 116 80881	220k 5% 0.1W			
3101	4822 111 91507	82k 5% 0.1W 0805			
3103	4822 111 91516	1k 5% 0.1W			
3104	4822 116 80887	68Ω 5% 0.1W			
3107	4822 111 91532	4k7 5% 0.06W			
3108	4822 111 91518	100k 5% 0.1W			
3109	4822 111 91511	2M2 5% 0.1W			
3110	5322 116 90216	47k 5% 0.06W			
3111	4822 116 80881	220k 5% 0.1W			
3112	4822 116 90443	180k 5% 0.1W			
3113	4822 111 91498	15k 5% 0.1W			
3114	4822 100 20166	10k 30%LIN 0.1W			
3115	4822 111 91532	4k7 5% 0.06W			
3116	4822 111 91518	100k 5% 0.1W			
3117	4822 111 91511	2M2 5% 0.1W			
3118	5322 116 90216	47k 5% 0.06W			
3123	4822 111 91517	10k 5% 0.1W			
3126	4822 111 91534	5k6 5% 0.06W			
3127	4822 111 91534	5k6 5% 0.06W			
3130	4822 111 91517	10k 5% 0.1W			
3133	5322 116 90216	47k 5% 0.06W			
3134	4822 111 90182	390k 2% 0.25W			

5000	4822 156 10666	RF
5001	4822 152 20677	10μH
5002	4822 157 53767	FM
5003	4822 157 52227	RF
5005	4822 157 60172	IF-FM
5006	4822 157 60122	4.7μH
5007	4822 152 20677	10μH
5008	4822 152 20677	10μH
5009	4822 152 20678	33μH10%
5010	4822 152 20679	68μH
5011	4822 157 50975	1 mH
5012	4822 156 11085	AM
5014	4822 152 20678	33μH10%
5015	4822 156 11084	IF-AM
5017	4822 156 11081	1.47μH
5018	4822 157 50975	1 mH
5020	4822 152 20681	

7030	4822 130 44257	BC547
7040	4822 130 44257	BC547
7041	4822 130 34173	BZX55-C5V6
7042	4822 130 30862	BZX55-C9V1
7043	4822 130 42681	BD939F
7044	4822 130 44257	BC547
7052	4822 130 34048	BZV86-2V6
7300	4822 130 44257	BC547
7301	4822 130 44257	BC547
7302	4822 130 44257	BC547
7305	4822 130 41845	ON796
7310	4822 214 51674	

1010	4822 252 51097	2.5A (T)
1030	4822 101 90188	BALANCE
1031	4822 101 90189	TONE
1032	4822 102 20096	50k 20%
1050</td		



Carbon film 0.2 W 70°C 5%	\triangle	Ceramic plate Tuning $\leq 120 \text{ pF}$ NP.0 2% Others $-20/+80\%$
Carbon film 0.33 W 70°C 5%	\square	Polyester flat foil 10%
Metal film 0.33 W 70°C 5%	\blacksquare	Metalized polyester flat film 10%
Carbon film 0.5 W 70°C 5%	\bullet	Polyester flat foil small size (Mylar) 10%
Carbon film 0.67 W 70°C 5%	\square/\bullet	Polysterene film/foil 1%
Carbon film 1.15 W 70°C 5%	\square/\blacksquare	Tubular ceramic
(C) Chip component		Miniature single Subminiature tantalum $\pm 20\%$

27 037A/C

©- Chips 50 V NP0 S1206			©-□ Chips 0,125 W S1206			©-□ Chips 0,125 W S1206		
1 pF 5%	4822 122 32479	4,7 E 5%	5322 111 90376	6,8 k 2%	4822 111 90544	7,5 k 2%	4822 111 90276	1U
1,2 pF 5%	4822 122 33013	5,1 E 5%	4822 111 90393	8,2 k 2%	5322 111 90118	9,1 k 2%	4822 111 90373	
1,5 pF 5%	4822 122 31792	5,6 E 5%	4822 111 90394	10 k 2%	4822 111 90249	11 k 2%	4822 111 90337	
1,8 pF 5%	4822 122 32087	6,2 E 5%	4822 111 90254	12 k 2%	4822 111 90253	13 k 2%	4822 111 90509	
2,2 pF 5%	4822 122 32425	6,8 E 5%	4822 111 90396	15 k 2%	4822 111 90196	16 k 2%	4822 111 90346	
3,3 pF 5%	4822 122 32079	7,5 E 5%	4822 111 90397	18 k 2%	4822 111 90238	19 k 2%	4822 111 90349	
3,9 pF 5%	4822 122 32081	8,2 E 5%	4822 111 90398	20 k 2%	4822 111 90251	22 k 2%	4822 111 90512	
4,7 pF 5%	4822 122 32082	9,1 E 5%	4822 111 90347	24 k 2%	4822 111 90512	27 k 2%	4822 111 90542	
5,6 pF 5%	4822 122 32506	10 E 2%	5322 111 90095	30 k 2%	4822 111 90216	33 k 2%	4822 111 90267	
6,8 pF 5%	4822 122 32507	11 E 2%	4822 111 90338	36 k 2%	4822 111 90514	39 k 2%	4822 111 90108	
8,2 pF 5%	4822 122 32083	12 E 2%	4822 111 90341	43 k 2%	4822 111 90363	47 k 2%	4822 111 90543	
10 pF 5%	4822 122 31971	13 E 2%	4822 111 90343	51 k 2%	4822 111 90274	56 k 2%	4822 111 90573	
12 pF 5%	4822 122 32139	15 E 2%	4822 111 90344	62 k 2%	5322 111 90275	68 k 2%	4822 111 90202	
15 pF 5%	4822 122 32504	16 E 2%	4822 111 90347	75 k 2%	4822 111 90574	82 k 2%	4822 111 90575	
18 pF 5%	4822 122 31769	18 E 2%	5322 111 90139	91 k 2%	5322 111 90277	100 k 2%	4822 111 90214	
22 pF 10%	4822 122 31837	20 E 2%	4822 111 90352	110 k 2%	5322 111 90269	120 k 2%	4822 111 90568	
27 pF 5%	4822 122 31966	22 E 2%	4822 111 90186	130 k 2%	4822 111 90351	140 k 2%	4822 111 90197	
33 pF 5%	4822 122 31756	24 E 2%	4822 111 90355	150 k 2%	4822 111 90215	160 k 2%	4822 111 90099	
39 pF 5%	4822 122 31972	27 E 2%	5322 111 90105	170 k 2%	4822 111 90264	180 k 2%	4822 111 90264	
47 pF 5%	4822 122 31772	30 E 2%	4822 111 90356	190 k 2%	4822 111 90408	200 k 2%	4822 111 90409	
56 pF 5%	4822 122 31774	33 E 2%	4822 111 90357	210 k 2%	4822 111 90414	220 k 2%	4822 111 90414	
68 pF 5%	4822 122 31961	36 E 2%	4822 111 90359	230 k 2%	4822 111 90415	240 k 2%	4822 111 90415	
82 pF 10%	4822 122 31839	39 E 2%	4822 111 90361	250 k 2%	4822 111 90417	260 k 2%	4822 111 90417	
100 pF 5%	4822 122 31765	43 E 2%	5322 116 90125	270 k 2%	4822 111 90418	280 k 2%	4822 111 90418	
120 pF 5%	4822 122 31766	47 E 2%	4822 111 90217	290 k 2%	4822 111 90420	300 k 2%	4822 111 90420	
150 pF 5%	4822 122 31767	51 E 2%	4822 111 90365	310 k 2%	4822 111 90422	320 k 2%	4822 111 90422	
180 pF 2%	4822 122 31794	56 E 2%	4822 111 90239	330 k 2%	4822 111 90424	340 k 2%	4822 111 90424	
220 pF 5%	4822 122 31965	62 E 2%	4822 111 90367	350 k 2%	4822 111 90426	360 k 2%	4822 111 90426	
270 pF 5%	4822 122 32142	68 E 2%	4822 111 90203	370 k 2%	4822 111 90428	380 k 2%	4822 111 90428	
330 pF 10%	4822 122 31642	75 E 2%	4822 111 90371	390 k 2%	4822 111 90430	400 k 2%	4822 111 90430	
390 pF 5%	4822 122 31771	82 E 2%	4822 111 90124	410 k 2%	4822 111 90432	420 k 2%	4822 111 90432	
470 pF 5%	4822 122 31727	91 E 2%	4822 111 90375	430 k 2%	4822 111 90434	440 k 2%	4822 111 90434	
560 pF 5%	4822 122 31773	100 E 2%	5322 111 90091	450 k 2%	4822 111 90436	460 k 2%	4822 111 90436	
680 pF 5%	4822 122 31775	110 E 2%	4822 111 90335	470 k 2%	4822 111 90438	480 k 2%	4822 111 90438	
820 pF 5%	4822 122 31974	120 E 2%	4822 111 90339	490 k 2%	4822 111 90440	500 k 2%	4822 111 90440	
1 nF 10%	5322 122 31647	130 E 2%	4822 111 90164	510 k 2%	4822 111 90442	520 k 2%	4822 111 90442	
1,2 nF 5%	4822 122 31807	150 E 2%	5322 111 90098	530 k 2%	4822 111 90444	540 k 2%	4822 111 90444	
1,5 nF 10%	4822 122 31781	160 E 2%	4822 111 90345	550 k 2%	4822 111 90446	560 k 2%	4822 111 90446	
1,8 nF 10%	4822 122 32153	180 E 2%	5322 111 90242	570 k 2%	4822 111 90448	580 k 2%	4822 111 90448	
2,2 nF 10%	4822 122 31644	200 E 2%	4822 111 90348	590 k 2%	4822 111 90450	600 k 2%	4822 111 90450	
2,7 nF 10%	4822 122 31783	220 E 2%	4822 111 90178	610 k 2%	4822 111 90452	620 k 2%	4822 111 90452	
3,3 nF 10%	4822 122 31969	240 E 2%	4822 111 90353	630 k 2%	4822 111 90454	640 k 2%	4822 111 90454	
3,9 nF 10%	4822 122 32566	270 E 2%	4822 111 90154	650 k 2%	4822 111 90456	660 k 2%	4822 111 90456	
4,7 nF 10%	4822 122 31784	300 E 2%	4822 111 90156	670 k 2%	4822 111 90458	680 k 2%	4822 111 90458	
5,6 nF 10%	4822 122 31916	330 E 2%	5322 111 90106	690 k 2%	4822 111 90460	700 k 2%	4822 111 90460	
6,8 nF 10%	4822 122 31976	360 E 1%	4822 111 90288	710 k 2%	4822 111 90462	720 k 2%	4822 111 90462	
10 nF 10%	4822 122 31728	390 E 2%	4822 111 90358	730 k 2%	4822 111 90464	740 k 2%	4822 111 90464	
12 nF 10%	5322 122 31648	430 E 2%	5322 111 90138	750 k 2%	4822 111 90466	760 k 2%	4822 111 90466	
15 nF 10%	4822 122 31782	470 E 2%	4822 111 90362	770 k 2%	4822 111 90468	780 k 2%	4822 111 90468	
18 nF 10%	4822 122 31759	510 E 2%	5322 111 9010					